

Title (en)
A TRANSITION BETWEEN A SIW AND A WAVEGUIDE INTERFACE

Title (de)
ÜBERGANG ZWISCHEN EINER SIW UND EINER WELLENLEITERSCHNITTSTELLE

Title (fr)
TRANSITION ENTRE UN SIW ET UNE INTERFACE DE GUIDE D'ONDES

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Abstract (en)
[origin: WO2014154232A1] The present invention relates to a transition arrangement (1) between a SIW and a waveguide interface (3). The SIW comprises a dielectric material (4), a first and second metal layer (5, 6) and a first and second electric wall element (7a, 7b) running essentially parallel and electrically connecting the metal layers (5, 6). The transition arrangement (1) comprises a coupling aperture (8) in the first metal layer (5) and a third wall element (7c) running between the first and second electric wall elements (7a, 7b). The transition arrangement (1) further comprises an intermediate transition element (9) with a first and second main surface (10, 11), and a transition aperture (12) having first and second opening (13, 14) with corresponding first and second widths (w1, w2). The transition element (9) is mounted over the coupling aperture (8), the first width (w1) exceeding the second width (w2) and the transition from the first width (w1) to the second width (w2) taking place between the first opening (13) and the second opening (14) in at least one step (15, 16). The second opening (14) is mounted to the waveguide interface (3) having an interface opening (17) being offset relative the second opening (14), a front step (18) being formed.

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